IMPACT OF MATERNAL OBESITY ON MATERNAL AND FETAL OUTCOME

ABSTRACT

INTRODUCTION

The world health organisation defines obesity as abnormal or excessive fat accumulation that presents a risk to health using the BMI>=30kg/m^2 as a crude estimate.

Obesity contributes to increased mortality and morbidity worldwide due to several diseases. Obesity incidence was increasing with age and negatively associated with level if physical activity. Obesity endangers both maternal and fetal wellbeing.Obesity in pregnancy is associated with higher rate of pre-eclampsia, GHTN, GDM,abnormal labour, cesarean section, DVT,,fetal macrosomia, RDS, birth defects.

Obesity complicating pregnancy were studied as early as 1975 since there is a number studies shared a clear association between maternal overweight and adverse obstetric outcome.

BMI is widely accepted as better measure of obesity.

Weight gain in pregnancy is calculated as difference between weight at the time of labour and her pre-pregnant weight.

AIM

The aim of the study is to determine the adverse effects of obesity in pregnancy and maternal and fetal outcome

MATERIAL AND METHODS

A comparative prospective study conducted in the outpatient department of Obstetrics and gynecology department ,TVMCH.100 women attending antenatal clinics in the first trimester were recruited for this study based on their BMI and followed up throughout the antenatal period , during delivery and postnatally. Both maternal and fetal outcome were studied.

Height was measured at the booking visit by standard methods. Weight was recorded twice at beginning of pregnancy and end of pregnancy to calculated the net weight gain. While BMI is calculated with weight recorded in 1st trimester booking visit using formula.

$$BMI = \frac{Wt}{(Ht\ in\ m)^2}$$

INCLUSION CRITERIA :

1. Primi gravida
2. Singleton pregnancies
3. Age >18 years < 40 years
4. Patients booking in TVMCH in first trimester

EXCLUSION CRITERIA :

1. Multigravida
2. Age <18 years > 40 years
3. Patients booking in TVMCH beyond first trimester
4. Multiple gestation
5. Chronic hypertension and preexisting renal disease
6. Diabetes mellitus
7. Previous history of thromboembolic disease
8. Previous history of connective tissue disorder

RESULTS :

We found that mean age of women conceiving for the first time is higher in obese women which was 26.18. obese women were found to have an abnormal weight gain in pregnancy with mean value of 79.84. sedentary occupation & urbanisation played a role in the prepregnancy BMI and weight gain 36% of women in the obese group were sedentary workers and 46% obese women resided in the urban areas. Antenatally about 36.7% of obese women developed preeclampsia , 22.4% of women with BMI > 30kg/m2 developed imminent

eclampsia , and 10.2 % of obese mothers developed GDM which was controlled by insulin. About 42.9% of obese women required induction of labour, among them about 71.4 % had induction failure. Intrapartum complications like failure to progress , failure of secondary powers were high in the obese group . And so the rates of emergency caesarean section were significantly high in the obese group. The rates of IUD , IUGR, neonatal complications like birth asphyxia , HMD were found to be more in the neonates of obese mothers.

CONCLUSION:

As the obstetrical and neonatal outcome is significantly altered due to obesity, we can improve them by overcoming obesity. As obesity is a modifiable risk factor, preconception counseling creating awareness regarding health risk associated with obesity should be encouraged.